

The Craft of Intelligence Allen Dulles

Allen Dulles, former Chief of the Central Intelligence Agency, tells what he has learned from nearly a half century of experience in diplomacy, international law, espionage, and the ever-deadly side of foreign affairs.

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amazingly complex research, hitherto secret, which we and the Soviets also are devoting to the problems both of shielding experiments with nuclear devices and of detecting them even when they are shielded.

Modern technology thus tries to monitor and observe certain scientific and military experiments of other nations by concentrating on the "side effects" of their experiments. Space research presents quite another kind of opportunity for monitoring. Space vehicles while in flight report back data on their performance as well as on conditions in outer space or in the neighborhood of heavenly bodies by means of electronic signals, or telemetry. These signals are of course meant for the bases and stations of the country that sent the vehicle aloft. Since, as in the case of ordinary radio messages, there is nothing to stop anyone with the right equipment from "listening in," it is obvious that nations competing in space experimentation are going to intercept each other's telemetry in an attempt to find out what the other fellow's experiments are all about and how well they have succeeded. The trick is to read the signals right.

Many important military and technical targets are, however, static and do not betray their location or the nature of their activity in ways which can be detected, tracked, monitored or intercepted. Factories, shipyards, arsenals, missile bases under construction do not give off telltale evidence of their existence which can be traced from afar. To discover the existence of such installations one must get close to them or directly over them at very high altitudes, armed with long-range cameras. This was, of course, the purpose of the U-2, which could collect information with more speed, accuracy and dependability than could any agent on the ground. In a sense, its feats could be equaled only by the acquisition of technical documents directly from Soviet offices and laboratories. The U-2 marked a new high, in more ways than one, in the scientific collection of intelligence. Thomas S. Gates, Jr., Secretary of Defense of the United States at the time of the U-2 incident, May 1, 1960, testified to this before the Senate Foreign Relations Committee on June 2, 1960:

From these flights we got information on airfields, aircraft, missiles, missile testing and training, special weapons storage, submarine production, atomic production and aircraft deployment . . . all types of vital informa-

tion. These results were considered in formulating our military programs. We obviously were the prime customer, and ours is the major interest.

In more recent days, it was the high-altitude U-2 reconnaissance flights which gave the "hard" evidence of the positioning in Cuba of Soviet medium-range missiles in late October of 1962. If they had not been discovered while work on the bases was still in progress and before they could be camouflaged, these bases might have constituted a secret and deadly threat to our security and that of this hemisphere. Here, too, was an interesting case in which classical collection methods wedded to scientific methods brought extremely valuable results. Various agents and refugees from Cuba reported that something in the nature of missile bases was being constructed and pinpointed the area of construction; this led to the gathering of proof by aerial reconnaissance.

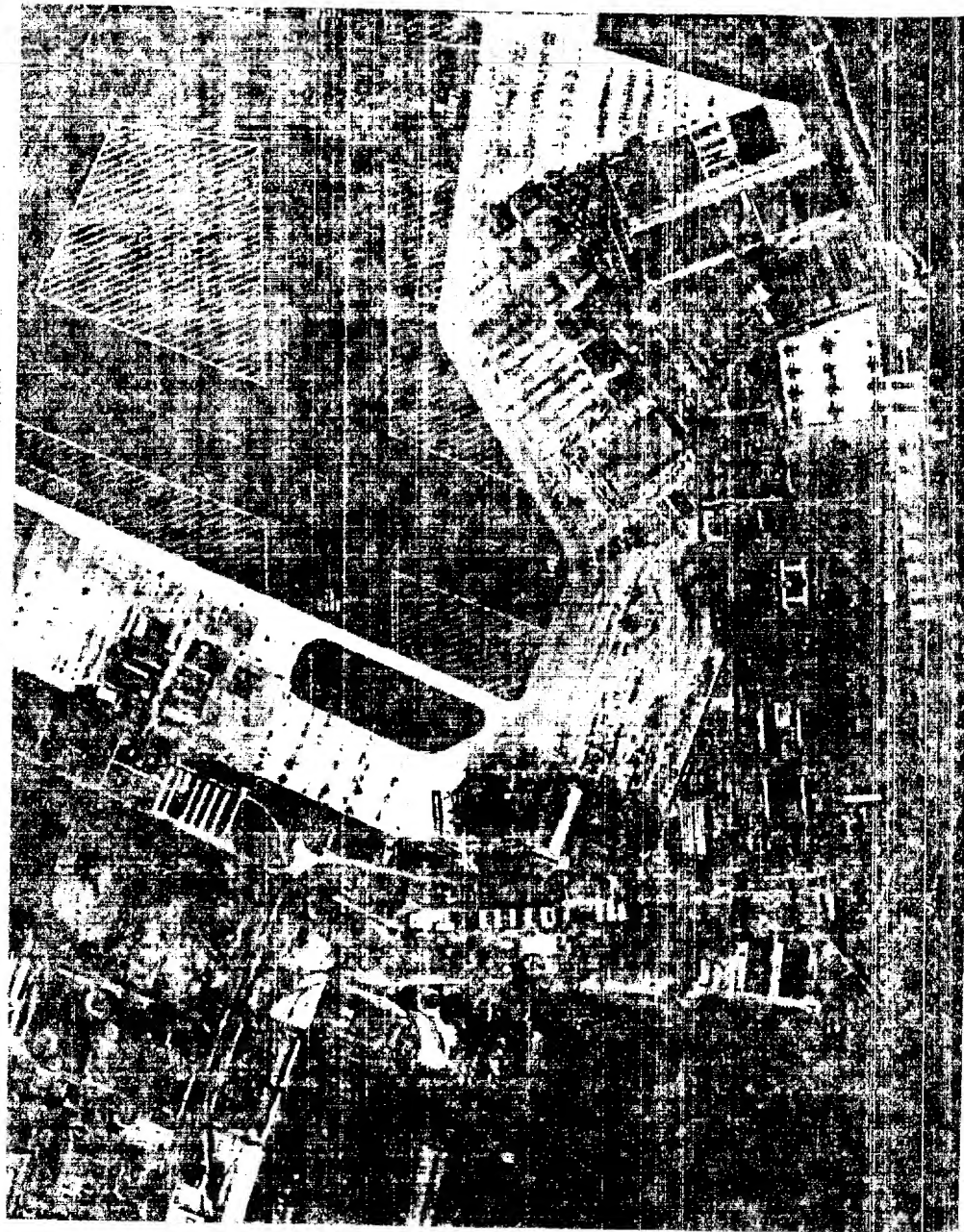
Eloquent testimony to the value of scientific intelligence collection, which has proved its worth a hundred times over, has been given by Winston Churchill in his history of World War II.¹ He describes British use of radar in the Battle of Britain in September, 1940, and also tells of bending, amplifying and falsifying the direction signals sent by Berlin to guide the attacking German aircraft. Churchill calls it all the "wizard war" and he concludes that "Unless British science had proved superior to German and unless its strange, sinister resources had been effectively brought to bear in the struggle for survival, we might well have been defeated, and being defeated, destroyed."

Science as a vital arm of intelligence is here to stay. We are in a critical competitive race with the scientific development of the Communist Bloc, particularly that of the Soviet Union, and we must see to it that we *remain* in a position of leadership. Some day this may be as vital to us as radar was to Britain in 1940.

AUDIO SURVEILLANCE

A technical aid to espionage of another kind is the concealed microphone and transmitter which keeps up a flow of live informa-

¹ *The Second World War*, Houghton, Mifflin Co., 1948-53.



This picture of the San Diego, California, naval air station, taken at 70,000 feet, illustrates the scope of the Navy's operations in the Pacific Ocean.